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A Longitudinal Study to Investigate Young Children's Changing Perceptions and Abilities within the Writing Process

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A LONGITUDINAL STUDY TO INVESTIGATE YOUNG CHILDREN'S CHANGING PERCEPTIONS AND ABILITIES WITHIN THE WRITING PROCESS

THESIS

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Abstract

This two year longitudinal study was designed to investigate young children's changing perceptions and abilities within the writing process. Twenty-one children were interviewed and asked to produce writing samples at four intervals during two school years, nursery school and kindergarten. Responses to questions were categorically arranged and writing episodes were classified among five levels that emerged. Changes among categories and levels were reported and observations were discussed.

Data suggested that children have a limited perspective of the functions of writing. Children were observed to progress from writing their own name, to writing names of significant others, to writing one syllable words as they developed within the writing process. It was reasoned that this sequence is psycholinguistically logical because it permits children to meaningfully explore written language from a global to a specific perspective.

Secondary findings included the observation that children increased use of language strategies as they progressed through the five levels, found school adjustment and mechanics of writing to be demanding and perhaps constraining, and perceived letter formation and spelling to be obstacles in writing. It was theorized that drawing may be indicative of progress if it is used as a rehearsal or negotiating strategy.

Results of this study suggest that teachers need to make children aware of the functions of writing through modeling, reading, and other activities. They must analyze children's writing carefully to evaluate progress and plan for instruction. Children must be encouraged to explore language through various strategies. Implications for research included discovering and testing techniques for modeling functions of writing, and finding evidence of the minimum-quantity hypothesis in English speaking children.

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Chapter I

Statement of the Problem

Recent research has suggested that reading is a process of a larger whole, with that whole being language. Listening, speaking, reading, and writing are being represented today as interrelated processes which are cognitively, socially, linguistically, and functionally similar.

In their study of young children who have learned informally to read and write researchers have found that children can become naturally literate through their own systematic efforts. The role of writing as a tool in exploring language and in becoming literate is gaining recognition. Writing as a process and young children's knowledge and ability with writing remain central issues for continued research.

Purposes

The purposes of this study were to investigate how young children perceive the writing process, and to describe the characteristics and changes in their writing before receiving formal instruction.

Questions to be Answered

1. How do young children perceive the writing process?
2. What are the characteristics of the writing episodes of young children?
3. How do young children's perceptions of writing and their writing episodes change over the span of two school years?

Need for the Study

Recent research has investigated the natural development of literacy in young children prior to their receiving formal school instruction. The school beginner today is a more sophisticated language user than was previously recognized. Such children are active, systematic, and strategic learners who rely on cues from their environment and social interactions to communicate and accept meaning. Children are naturally motivated to become literate on their own when constraints of conventionality do not interfere with their uninhibited search for meaning in print. Research also suggests that oral and written language interact while developing simultaneously. If educators are to fully appreciate the knowledge and strengths that children bring to school with them, and if they are to permit natural literacy strategies to operate without constraints, then continued efforts to fully understand the school beginner and his/her approach to becoming literate becomes essential.

That many children write before learning to read, even before beginning school has been witnessed by many researchers (Bissex,

1980; Chomsky, 1971; Durkin, 1966; Teale, 1978). Durkin (1966) concluded that for some early readers the ability to read seemed almost like a by-product of the child's ability to print and spell. She described stages whereby these "pencil and paper kids" first drew and scribbled, then copied objects and letters, then questioned about spelling, and finally were able to read. Chomsky (1971) has suggested a reverse order of present educational curriculum in which learning to write would precede learning to read. The importance of the written code in testing the rules of language and in fostering a desire to communicate was stressed by Clay (1977). Similarily, Dyson (1982) argues that the slow process of writing is ideally suited for reflecting upon the nature of written language. Hildreth (1963) concluded that writing focuses attention to detail and reinforces memory for distinctive features of words. Platt (1977) suggested that handwriting should be an intermediary stage between drawing and reading. In describing children who write frequently, Dinan (1980) claimed that they were more sensitive to language because they listen better, question more, and note similarities, differences, and uniquenesses in language. Hauser (1982) stated that all children benefit from writing because it permits children to experiment with language, learn to communicate through the written expression, and gain pride through their work. If writing truly enhances reading development, and if it can be a tool in learning to read, then understanding writing as a process is necessary for those who teach reading.

Cognitive theory has characterized the school beginner as egocentric, and limited by difficulty with decentering and mentally representing experience (Piaget & Inhelder, 1969). Linguistic study has indicated children's uncertainties about differing functions of oral and written expressions of language and has suggested a need for metalinguistic terminology in learning to read and write. The implication of research in these areas is that writing may serve as a concrete object for manipulating and exploring written language. More complete clarification of children's understanding and perceptions of writing may reveal important implications for enhancing the development of literacy in the young child.

DeFord (1980) has stated that much is still unknown about the course of children's writing development, and a framework is needed on how they develop control over the written medium. Graves (1981) advocates research involving contexts broadened to include closer and longer looks at children while they are writing. He has suggested that more needs to be learned about what occurs within the writing episode. Graves (1981) sees a need for information gathered over time of children's changing concepts of writing and recommends data derived from the child functioning in the writing process, as well as from analysis of the writing product. His questions about what children do when they write justify this study.

Definition of Terms

Function of writing - Halliday (1977a) has categorized his seven functions of adult language as interpersonal, ideational, or textual. He proposes that written language incorporates mostly ideational functions. Clay (1975), Downing (1969), Reid (1966), and others have considered communication or the sending of a message to be the function of writing. For the purposes of this study, the function of writing will be defined as the sending of a message to self or others for pleasure or communication through the written expression of language.

Writing episode - Graves (1981) defined writing episode as encompassing all that a child does before, during, and after a single writing. He maintains that the meaning of any situation is contained in the context of the act and that understanding of the written word demands investigation of the time-space element.

Design

During this two year longitudinal study, 21 children were interviewed and asked to provide samples of writing at four intervals within their nursery school and kindergarten years. Responses to the interview questions and the results of the writing episodes were analyzed to better interpret children's changing perceptions and abilities within the writing process.

Limitations

The subjects of this study comprised a rural-suburban school district which limits application of conclusions to a similar group. It is important to note the difficulty in ascertaining the degree of constraint on natural development imposed by the nursery school and kindergarten settings.

Summary

Writing, highly valued in literate societies, is receiving increased attention by researchers as a language process and as an instrument for enhancing literacy development. Studies of young children who have become naturally literate through their own efforts have revealed that children are motivated, systematic language users who explore written language through the writing process. Understanding the thoughts, perceptions, and capabilities of the school beginner is necessary for capitalizing on the natural strengths that young children bring to school with them. This study attempted to unfold a deeper understanding of children's concepts and abilities in writing and estimate more clearly children's growth through the writing process.

Chapter II

Review of the Literature

Purposes

The purposes of this study were to investigate how young children perceive the writing process, and to describe the characteristics and changes in their writing before receiving formal instruction.

The complexity of children's learning in the area of language involves background in many areas related to education. Psychology, linguistics, sociology, and education contribute to the understanding of the complex process through which young children become literate. This paper has divided the important recent research that is relevant to young children and the writing process into three main sections. These three areas are natural literacy, cognitive development and language, and early writing.

Natural Literacy

The development of literacy in preschool children has been a focus of recent research. Psycholinguistic theory represents the child as a little linguist who approaches language with predetermined strategies for systematically acquiring a set of language rules through hypothesis testing. The process of language development in children has been observed to be universal. It is characterized by overgeneralizing underlying rules, and contains cognitive and social components (DeStefano, 1978).

Halliday (1977a) has identified six developmental functions of language which prompt a child's creation of a system through which success in meaning becomes a necessary and sufficient condition for the learning of adult language. His six developmental functions of language are: instrumental, regulatory, interactional, personal, heuristic, and imaginative. Function precedes and motivates the development of the form of language as children respond to personal and social needs (Goodman & Goodman, 1981). Holdaway (Park, 1982) referred to language as the embodiment of whole meanings so that strategies for language learning are dependent on these human meanings. Buckley (1979) defined the child as a "maker of meaning" who survives through acting upon his environment and making sense of it. Harste and Burke (1980) have stated that children gain control of written language through expectation that written language will make sense. They stress that children must encounter the language process in its complexity in order to learn control. Holdaway (1979) discovered that children who have early experiences with literature in a natural environment, such as the bedtime story, become "set for literacy." He found that such children learned many of the linguistic, motivational, and orthographic factors for dealing with written language. He reasons that stories are powerful in the early language experience of children because they are multi-functional.

There has been discussion of the four processes of language (listening, speaking, reading, and writing) and of the differences

between receptive and productive processes. K. Goodman (1973) emphasized that listening and speaking are not mirror images of reading and writing, but individual processes involving perceptive organization and implementation of rules and cues. Birnbaum (1980) suggested that the reasons for learning written language are similar to the reasons for learning to speak. She stated that written language enlarges the capacity for shaping experiences into meaning, for representing meaning to self and to others, and for representing self to others in the environment. Temple, Nathan, and Burris (1982) discussed functional similarities between learning to talk and learning to write and emphasized that children need opportunities to use writing meaningfully to serve different purposes in order to develop literacy. Graves (1983) differentiates between writing and speaking, but explains that writing has its roots in speech because the human voice underlies and shows itself throughout the life of the writer.

It is often assumed that children learn to listen and speak at home, but must attend school to learn to read and write in a more formal setting. Research has substantiated that some children learn to read and write independently prior to going to school (Bissex, 1980; Clark, 1978; Durkin, 1966; Goodman & Goodman, 1981; Iredell, 1898; Lass, 1982; Lesiak, 1978; Mason, 1980; Torrey, 1969). Teale (1982) discussed three ingredients which contribute to natural literacy: environmental print provides contact opportunity, contact with print establishes a "puzzle," and investigation of the

puzzle initiates the extraction of rules to make sense of written language. He described literacy learning as a social process of interaction with the environment through speech, whereby teaching and learning become interactive. His conclusion is that natural or informal literacy comes at the initiative of the child. Clay (1977) noted that the transition from non-reader to reader takes place in the presence of print when the child actively seeks to discover how oral and written language are related. She observed that the desire to communicate rendered the importance of the written code more obvious to children. Harste and others (1981) referred to reading and writing as sociopsycholinguistic processes and as such children develop models of written language from natural ongoing encounters with print. Their conclusion was that oral and written language develop in parallel fashion and are both learned naturally through orchestrating signs and cue systems within a contextual framework. They proposed four strategies employed in learning literacy which are used by children and adults: semantic intent, negotiability, hypothesis testing, and fine tuning language with language. Environmental constraints limit use of these strategies and prevent learning. Harste and others characterize language growth as a "multilingual event" with constant interplay between oral and written language. Clark (1978) noted the social component and role of environment in her study of early readers who had a significant adult to answer questions and to interact with interest, encouragement, and stimulation.

Espousing a psychogenetic viewpoint, Ferreiro and Teberosky (1982) defined the name, minimum-quantity, and syllabic hypotheses that are formulated by young children as they solve written language problems. The strict consistency that children demand of themselves and the internal logic of the developmental progression of their problem solving were found to be two outstanding characteristics of these children.

In a study of preschool children, Goodman & Altwerger (1981) concluded that reading and writing are developmental processes where children develop their own written language system. The children in their study exhibited environmental print awareness, but little knowledge of the function of print in books. They noted that children attend to meaning and use the context of the situation to interpret environmental print. Likewise, Hiebert (1978) found some children who were able to make sense of written language in the environment but could not read when context was absent. Taylor (1982a) discovered young children who used print for significant purposes at home but claimed they could not read because reading was different at school. One child's definition of reading at school was "you do it in groups." Clay (1982) discussed this dilemma with respect to writing. She observed that the teacher insisting on perfect copy and aiding children to put ideas into writing during a writing lesson suggested to children that "the correct form lay somewhere outside them and that the initiative would not be theirs" (p. 67). Y. Goodman (1982) explained that language is learned when it is used to satisfy

personal wants, and that children become literate when they see written language used for many reasons, when they have a reason to use it, and when they use it to become continuously better at both reading and writing.

Literacy research has clearly demonstrated that learning to read and write can be as natural as learning oral language, in an environment where print functions purposefully and where literacy is necessary for social interaction. Children are socially motivated to learn to read and write through a self-regulatory process in which they explore and re-invent for their own the underlying rules of written language.

Cognitive Development and Language

The mental perceptions of young children may reveal important implications for developing literacy.

Reid (1966) interviewed young children and found a lack of expectation of what reading was going to be like, of what the purpose of reading is, and of the relationship between reading and writing; but she noted that the children exhibited more certainty about writing. Denny and Weintraub (1966) noted similar uncertainties about reading, and Goodman and Altwerger (1981) observed that there was a better understanding of the functions of writing than of reading in young children. Goodman and Altwerger also noted negative attitudes about reading whereby the children believed that they cannot learn to read on their own and that reading is hard and meaningless. Downing (1970) replicated Reid's

interviews and concluded that children confuse drawing with writing, have difficulty with the purpose of language and find spacing a problem. Robeck and Wiseman (1981) concluded that children do have a functional concept of the purpose of reading and writing and have immature but developing concepts of linguistic terms and direction of print. One of the first steps in learning to read is realizing that one doesn't know how (Mason, 1967). Cohn (1981) maintained that young children are aware that oral and written languages are different, and that children engage in reading-like behavior simultaneously as they begin writing. Carey (1982) stated that young children exhibit a thorough understanding of the role of books and reading. Perhaps Goodman and Altwerger (1981) have offered a resolution to these discrepancies in discovering that although children have little knowledge of the function of print in books, they indicate knowledge of the form of print and have a sense of story. King and Rentel (1979) suggested a possibility of inferring stages and sequences in the development of writing. They theorized that children bring from oral language concepts of written messages and sense of story which may influence their writing.

Cognition and metalinguistic ability have been considered factors in children's literacy development. Piaget (1964) asserted that logic develops as thoughts become socialized and that children's logic before age seven lacks exactitude and objectivity because the social impulses are counteracted by egocentricity. The child, he believed, has a problem in forming objective conceptions

of reality because of limited capacity to disassociate self from thought. Piaget and Inhelder (1969) listed obstacles encountered by the egocentric child. They suggested a problem for young children in mentally representing what had already been absorbed on the level of action. They described the laborious task that the child undertakes in decentering self from objects and events in the universe. Finally, they noted that these difficulties with decentering apply to the interpersonal and social universe where the child must reconcile others' views with his own. Graves (1983), commenting on the egocentric child, attributes self-centered confidence and fearlessness as a moving force for great progress during the first year of school. He stresses that there can be no decentering for a child writer until s/he recognizes an imbalance or problem and therefore feels a need for another look. Almy (1966) who repeated the demonstrations and interviews of Piaget found that children view as different, problems and phenomena that adults regard as similar or identical. She concluded that the ability of the young child to use language in expressing logic is an outcome of activity. Teale (1982) discussed Piaget's cognitive theory praising its dynamic character and proclaiming the child's interaction with the environment as the key to the developmental process. Another important consideration in understanding children's thinking is that children are often unable to verbalize something which they are clearly able to demonstrate (Almy, 1966; Downing, 1969). Clay (1977) discussed the transitional Piagetan stage of five through seven year olds, explaining that children's

inability to use several cues leads them to form some false conclusions about language.

Vygotsky (1962) maintained that written language requires a high level of abstraction and that in learning to write the child must disengage himself from the sensory aspect of speech and replace words by images of speech. Imagined speech requires symbolization for the imagined sounds and is consequently more difficult than oral speech. For example, the symbolization required for algebra makes it harder than arithmetic. Downing (1969) found that children were confused over the abstract linguistic terminology. He concurs with Vygotsky's claim that the abstract quality of language is the main stumbling block for the egocentric child. Geller (1982) observed how children's word play helped them discover that verbal symbols or words are arbitrarily related to their referents. This discovery allows for understanding the abstractness of the language system, where literacy requires the derivations of meaning without the benefit of the situation and intonation which accompanies oral language. Smith (1978) stated that there are two special insights that children must have in order to learn to read. They must understand that print is meaningful and that written language is different from speech.

Reid (1966) found that children had limited "linguistic equipment" to deal with reading. This was indicated by children confusing numbers with letters, words with names, and letters with words. Templeton (1980) theorized that children must be able to treat language as an object to explore it. She defined implicit

and explicit knowledge reflecting cognitive development and determined that children need time to develop the concept of a word. Conceptualizing a word as a unit is difficult for a child because segmentation in spoken language is not readily apparent. Morris (1981) concluded that beginning readers and writers must come to terms with word units in spoken and written language. He said, "in the act of reading, the child must learn to map spoken words in his or her oral language to the printed unit spatially arrayed along a line of text; in the act of writing, the child must be able to conceptualize the word as an object composed of letters that march left to right and correspond to sounds" (p. 666). Agnew (1982) used the term "code consciousness" to refer to children's understanding of the technical features of written language. She described steps in which teachers may analyze an individual's technical vocabulary through dictated stories.

Children have a strong desire to master their environment and must be actively and directly involved in understanding the precise connection between reading, writing, and oral language. King (1980) suggested that children must learn the distinctions between written and oral modes of language to create written text, and claimed that children begin to make these distinctions intuitively before beginning school. Gillet (1979) emphasized the use of writing as a concrete experience for children in manipulating and discovering the features of written language. Many other researchers have suggested this role of writing as a tool for

exploring the underlying rules of written language (Blass, Jurenka & Zirzow, 1981; Chomsky, 1971; Clay, 1977; Cook, 1980; Durkin, 1966; Dyson, 1982; Platt, 1977; Tompkins, 1982; Wilson, 1981).

In summary, cognitive theory maintains that the child is a dynamic learner who develops through interaction with the environment. The egocentric child, however, is hampered by limited ability to decenter and to mentally represent experience. Researchers imply that the abstractness of language poses difficulty for young children and suggests that children need a metalinguistic ability to work with written language and to deal with differing functions of the oral and written modes. The conclusion is that writing may serve as a concrete experience for the exploration of written language by the egocentric transitional school beginner.

Early Writing

Writing has been described as a multi-staged process involving prewriting, writing, and post writing activities. Talking, planning, gathering information, and clarifying points characterize the prewriting phase. Rough drafts, outlines, false starts, charges, and re-drafts represent the writing activities. The post writing stage involves revisions, deletions, reorganization, editing, and proof reading (Macrorie, 1980). Graves (Walshe, 1982) recommends that children gain ownership and control over their writing. He advocates free choice of topic, an available audience

for direction, time and individual methods for rehearsal, and individual conferences with good questioning techniques and individual skill teaching. He emphasizes the importance of the phase of revision where writers reconcile what is expressed with what is intended.

Writing as a process approach requires a new role for teachers. The suggestion that writing is more caught than taught (Walshe, 1979) describes the teacher as a model and a facilitator of writing. Writing as a process requires children to have time to think, to write, to reread, and to read aloud (Golub, 1979). Writing as a process means that measuring growth and assigning grades must be defined to mean continuing response, evaluation, suggestions, and encouragement (Cooper & O'Dell, 1975).

"Children have a natural ability to write - certainly not the carefully polished and well organized prose expected of high school graduates, but spontaneous expression through totally uninhibited use of language from a unique point of view" (Holbrook, 1981, p. 864). Furthermore, children enjoy writing and want to do so on the first day of school (Graves, 1983). Numerous teachers have introduced writing in classrooms and found that young children enjoy writing, learn to read through these writing experiences, and become quite successful at writing (Giacobbe, 1981; Graves, 1983; Hauser, 1982; Milz, 1980; Walshe, 1982).

Clay (1982) has suggested that young writers move by various routes across several strands of language learning. This

developmental view consists of six components which are:

trying to get a theory about written language
trying to express their experiences in writing
trying to construct stories
exploring sound to spelling patterns
developing new language options
developing a range of writing forms

DeFord (1980) studied young writers and noted that their strategies reflected a movement from global to more differentiated concepts of print. She noted that concern for letters grew out of attempts to communicate messages. Her non-sequential framework for development of writing includes ten stages which begin with scribbling and finalize with the ability to compose a form of discourse. In a case study of her son, Bissex (1980) found that his earliest writings were expressive and directed to an audience. He moved from using letters to convey a general message to using letters to spell words. His interest in conventions of writing coincided with great progress in reading. Graves (1983) noted such interest in conventions at the end of first grade, and he suggests that conventions of handwriting and spelling are tools of the writing process. He observed young children correctly using punctuation to give voice to their writing.

The environments of early writers have received attention in an effort to determine that which prompts their interest. Hall, Moretz, and Statom (1976) found that homes conducive to early writing provided role models who wrote and offered a motivation to write. Durkin (1966) observed that early writers came from homes where parental help and available writing materials were abundant.

Clay (1976) noted the importance of the parental role in valuing written messages while studying Samoan children who witnessed their parents writing hasty responses to letters brought in on boat day. Graves (1973) discovered that children write more often and in greater length in an informal environment. Taylor (1982b) observed that children wrote abundantly while playing. The children made elaborate preparations for playing restaurant or beauty salon, in forming clubs, and in selling lemonade. They wrote signs, lists, menus, and other meaningful things and often lost interest when the organization was completed. "Children are ready to write when they understand what writing does, when they are interested in writing, when they want to communicate through writing, and when they understand that written symbols represent meaning" (Haley-James, 1982a, p. 462).

Children have been observed by researchers to be systematic in learning to write just as in acquiring language. Wheeler (1972) analyzed the writings of kindergarten children and observed that motor skills did not present as many problems as did perceptual learning in beginning to print. She concluded that children's development in writing resembled other self-directed learning such as language and motor development. Read (1975) noted that young children organize speech sounds into logical categories from which they construct invented spelling systems. Paul (1976) and Gentry (1977) established stages or strategies of spelling in children which culminate in the child's achieving standard forms. Chomsky (1976) studied similarities in young children's invented spellings

and noted that the children were unable to read what they had written. Beers and Beers (1981) reported that children's spellings tell what they know about words and advocate that children be encouraged to write using spelling strategies they have invented.

Hildreth (1936) studied three to six year old children and their name writing ability. She observed children writing mostly in upper case, initially drawing rather than writing, and imitating parents' cursive by scribbling. She also noted an interest in letter formation among four year olds. Her references to horizontal movement parallel today's concept of left to right directionality. In a subsequent paper, Hildreth (1963) described a school beginner as able to write his name, print letters and numbers, and as having an interest in copying. The writing of their own name was described by Temple, Nathan, and Burris (1982) as a trailblazing event for children. They noted that name writing becomes a process which can be repeated for other words and also offers a repertory of known letters.

In examining writing samples of young children, Clay (1975) observed thirteen concepts and principles that characterize and describe children's systematic development of the writing process. They are the sign, message, and space concepts; and the copying, flexibility, inventory, recurring, generating, directional, and abbreviation principles. She also described a reversing pattern and confusion when the page arrangement interfered with writing. Clay's concepts and principles substantiate many of the loosely described findings of Hildreth and Durkin. Wiseman and Watson

(1980) analyzed the writings of four and five year old children and found that all the children had learned that letters are related to writing, and that writing has certain forms. The children demonstrated rudiments of beginning spelling and all except two children were able to determine the function of writing. Goodman and Altwerger (1981) in interviewing young children and asking them to write found some children produced words, letters, or their names. Some children drew or scribbled, some read their writing, others pretended to read, and some said they had not written anything. Responses of the children in their study indicated that children are more willing and able to make statements about writing than about reading.

Dyson (1981) observed that talk surrounded kindergarteners' written graphics and this discussion augmented their message producing power. She witnessed children's use of oral language as a tool in writing. Oral language was used by the children she studied to seek needed information, for assistance in the encoding of words, and for distancing self from the written work. Dyson observed children writing lists of names after memorizing letters and their spatial arrangements. Dyson and Genishi (1982) observed two first graders who used oral language to encode words into print and to transform ideas from speech to writing. Haley-James (1982b) stated that talk is central to learning from writing and that discussion of a work in progress provides instant feedback. She asserted that conversation helps writers objectify and analyze their efforts to construct and communicate meaning. Buckley (1979)

discussed the influence of language on thought, and stated that the young child talks aloud to get on with verbal thinking and thereby uses this talking strategy in confronting academic problems. Oral expression as an aid to thinking was also observed by Tough (1974) who noted that talking initiates and refines a child's thinking. Dyson and Genishi (1982) claimed that composing is as much an oral task as a writing task.

Milz (1982) has summarized in five main points much of the recent research on early writing. She stated: writing is learned through use; children need to see writing being used; writing must be functional if it is to be meaningful; writing develops in and out of school in a literate environment; and writing develops in children at different rates within the same age group.

Summary

Recent research has discovered that the young egocentric child comes to school with a complex set of systematic strategies for extracting the underlying rules of language. The school beginner is motivated to become literate in societies where written language and print are functional and necessary for interaction among their members. The recently recognized role of writing as a tool and concrete experience in learning to read and in becoming literate mandates continued investigation into the process of writing. By recognizing and understanding the strategies, techniques and methods that children apply in learning to write, educators may aid the process of literacy learning.

Since children's thoughts and perceptions clearly influence and limit their abilities, knowledge about young children's thinking concerning the writing process, may suggest techniques which eliminate obstacles and enhance literacy development.

Chapter III

Design

Purposes

The purposes of this study were to investigate how young children perceive the writing process, and to describe the characteristics and changes demonstrated in their writing before receiving formal instruction.

Questions to be Answered

1. How do young children perceive the writing process?
2. What are the characteristics of the writing episodes of young children?
3. How do young children's perceptions of writing and their writing episodes change over the span of two school years?

Methodology

Subjects

Twenty-one children from a rural-suburban area of western New York State were studied over the span of two school years, nursery school and kindergarten. At the beginning of the study, in the fall of 1981, the children were four years old or approaching four by December and were enrolled in a parochial nursery school. In the fall of 1982, six of the children remained at the parochial school for kindergarten, while the other 15 attended the nearby public school. The children were six years old or approaching six at the conclusion of this study in the spring of 1983. There were

ten girls and 11 boys in this sample group.

An interview with the nursery school teacher indicated that the children represented a range of middle class homes. All the children came from two parent homes that the teacher felt were academically supportive. She described the group's abilities as varied, with at least three having good ability and a few possessing lesser ability. The teacher thought that three of the families were somewhat deprived financially, and commented that the tuition for nursery school was a sacrifice for them. The fathers' occupations indicate a range of skills and educational backgrounds. Examples of some of their occupations include: farmer, bank officer, truck driver, mechanic, teacher, electrician, police officer, factory worker, vice-principal, computer operator, independent businessman, and electrical engineer. Five mothers worked either full or part time. The group was described as quite varied. The teacher found some children who learned easily, while at least four or five had attention problems. The teacher indicated that these children represented a mixture of backgrounds and abilities.

Instruments

Instruments used in this study were:

1. Three interview questions designed by the researcher.
2. Samples of the children's writing requested by the researcher.

Procedure

Interviews were conducted individually with each child. The interviews were held at four intervals, six months apart, during the two school years (fall 1981, spring 1982, fall 1982, spring 1983). The procedure at each interval included three meetings with the child and was conducted in the same manner as follows:

Meeting 1 - First a request for a writing sample was made as follows: "Please write everything that you know how to write."

Then the child was asked to respond to the following three questions:

1. Why do people write?
2. What do you have to do to be a good writer?
3. What is the hardest thing about writing?

Meetings two and three were limited to the request for a writing sample.

Children's responses to the interview questions were tape recorded for reference. Writing samples were retained for analysis. The researcher also noted important observations such as behavior, non-verbal responses, and comments during the writing episodes.

Each meeting with the children began with a few exchanges of informal talk to relax them. The interview questions were begun when the children appeared finished or at a standstill in their writing. It was not uncommon for a child to go back to writing after responding to the questions.

When children had difficulty thinking of ideas to write, the request was repeated. When a child appeared finished, the question "Is there anything else you can write?" was raised. This allowed children to decide when the session was completed. In a few cases, the suggestion to write their names was given to get a child started. To encourage children to continue, the researcher often commented that children were working hard or trying to do a good job.

Analysis

The responses to the three questions were categorically arranged. The categories of responses for question one were analyzed according to the functions of language outlined by Halliday (1977a). Percentages within categories of responses for questions two and three were reported. Changes within categories and important observations were noted.

The writing episodes were classified according to five levels of writing ability that emerged. These levels were analyzed for evidence of the use of concepts and principles described by Clay (1975) and for use of strategies recognized by Harste and others (1981). Changes and observations were discussed.

Summary

A two year longitudinal study was designed to investigate children's changing perceptions and abilities in writing. Twenty-one middle class children were interviewed and asked to produce writing samples at four intervals during the span of nursery school and kindergarten. Responses to interview questions were categorized and analyzed. Writing episodes were classified within five levels and described.

Chapter IV

Analysis of Data

Purposes

The purposes of this study were to investigate how young children perceive the writing process, and to describe the characteristics and changes in their writing before receiving formal instruction.

Part 1

Analysis of the Three Interview Questions

Question One

Responses to the question, "Why do people write?" were categorized among seven categories:

A - Unacceptable; responses included "I don't know," no response, or an avoidance of a response

B - Writing for fun; responses included "I want to," "I like to," or "It's fun"

C - Creating; responses included making something or making pictures

D - Useful; responses included aiding memory (grocery lists) or figuring things out (drawing on a map)

E - Write to learn how; responses included "Learn to write," "Learn to spell," "Be an artist," or "Be a writer"

F - Message sending; responses included letter or note writing or the sending of greeting cards and mail

G - Literary; responses included writing books or stories

Table 1 shows the percentage of responses to question one within a category at each of the four interviews.

Table 1

Percentages of responses to question one within a category at each interview

Categories	Fall 1981	Spring 1982	Fall 1982	Spring 1983
A	50	33	13	4
B	32	25	25	24
C	18	4	17	16
D	0	8	8	8
E	0	8	8	16
F	0	21	21	20
G	0	0	4	8
Unknown	0	0	4	4

Note. Percentages are rounded to the nearest whole number.

All of the children who gave an acceptable response to question one described reasons for writing which were consistent with one or more of the functions of language outlined by Halliday (1977a). A brief summary of the functions of language is given for reference (Halliday, 1977a; Halliday, 1977b; Smith, 1977).

Instrumental - "I want"

The child becomes aware that language is a means of getting things done or as a means of satisfying material needs

Regulatory - "Do as I tell you"

The child uses language to control the behavior of others

Interactional - "Me and you"

The child uses language to interact with others around him and for getting along

Personal - "Here I come"

The child uses language in expressing uniqueness, individuality, and pride

Heuristic - "Tell me why"

The child uses language to explore the environment, seeking and testing knowledge

Imaginative - "Let's pretend"

The child creates an environment and takes over the universe through imaginative writing and by making up stories

Representational - "I've got something to tell you"

The child is aware of conveying a message or expressing propositions

Responses of the children within categories B and C indicate that these children recognized a personal function of writing. Responses of category B such as "I like to" or "It's fun" indicate, as Britton (1970) has adequately described, "the delight of utterance." Britton discussed the spectator role of language, whereby a person uses language for the pleasure it brings. These children clearly perceived the use of writing for their own enjoyment. Responses in category C indicate that these children understood the self expressive and personal function of writing, but were confused about discerning the differences between drawing and writing. This confusion may have existed also for some children whose responses were of category B. However, the degree of confusion cannot be determined.

Responses in category D indicate that these children perceived the instrumental function of writing. They clearly described reasons for writing that indicated a method for satisfying needs.

Children who gave responses within category E noted the role of writing for practice and training in becoming better at writing. Halliday (1977b) stated that the techniques of mastering or practicing a language does not constitute the use of language. These children may view writing as a means of rehearsing and practicing, similar to a baby learning to talk. This conception of writing may be explained by the traditional attention given to

printing during kindergarten and nursery school. These children did not define a function of writing and were mainly concerned with learning how to write at this point. Their concern for the "learning" and their acknowledgement of the task, indicated an appreciation for the value placed on writing by others in the environment. This recognition suggests a distinction from the baby learning to talk and the beginnings of an intuitive discerning of self and environment. Therefore, these children perceived the use of writing as a representation of their growth and identity. They thereby intuitively recognized a personal function, if not other functions of writing.

Responses in category F indicate that these children observed the interactional function of writing. They frequently referred to socializing through letters, mail, and greeting cards.

Because of the creativity involved in writing stories and books, responses within category G indicated that these children were aware of the imaginative function of writing.

Thus, categories of acceptable responses to question one represented the functions of language in the following manner:

B, C, E - personal

D - instrumental

F - interactional

G - imaginative

The two responses which could not be categorized were: "Cause they know my name and cause they love me" and "Cause they like me and they like my name." They were classified as representing

awareness of the interactional function of writing.

Table 2 shows the perceived functions of the 21 children at the four interviews as classified in the manner described.

Table 2

Distribution of the perceived functions of writing

Name	Fall 1981	Spring 1982	Fall 1982	Spring 1983
Todd	4	4	4	4
Leah	-	-	6	6
Kimberlee	4	1	3	3
Joy	-	-	4	1,3
Donielle	4	4	4	4
Amy	4	4	4	4
Joseph	4	-	-	4
Robert	-	-	4	4
Kent	4	4	4	4
Michael	-	-	4	4
Jessica	-	4	4	4
Jason	4	4	3	1
Matthew	4	3	4	4
Ammie	-	-	-	3
William	-	3,4	1,3	3
Shawn	-	3	3	3,4
Emily	-	-	-	4
Beth	4	1,4	3	4,6
Gregory	-	3	3	-
Adam	4	-	4	4
Kendra	-	3,4	1,3	3

1 - Instrumental
2 - Regulatory
3 - Interactional
4 - Personal
5 - Heuristic
6 - Imaginative
7 - Representational

Table 3 shows the percentage of children's responses according to perceived function for the four intervals.

Table 3

Percentages of responses to question one according to perceived language function

Functions	Fall 1981	Spring 1982	Fall 1982	Spring 1983
Instrumental	-	8	9	8
Interactional	-	21	30	25
Personal	48	38	43	54
Imaginative	-	-	4	8
Unacceptable	52	33	13	4

Note. Percentages are rounded to the nearest whole number.

It must be noted that some children were able to perceive more than one function of writing, so that percentages in each column are based on the number of total perceived functions rather than 21 responses.

The most observable trend was the decrease in unacceptable responses with age. This may indicate that children at the end of kindergarten are beginning to possess the ability and desire to talk about their learning and thinking. This may be the beginnings of a metalinguistic and metacognitive awareness.

It is interesting to note that all but one child recognized

one or more functions of writing by the end of kindergarten. Clearly, the most commonly perceived function of writing by children in this study was the personal function of writing. This may likely be the first function of writing that the young child perceives and may be related to the egocentric cognitive stage of his/her development. At the end of kindergarten, over half of the responses still incorporated this self expressive personal function of writing.

The interactional function of writing was the second most commonly perceived use of writing by these young children. It is likely that interactional writing has been modeled for them by significant adults through letter and note writing, and through emphasis on mail and greeting cards. Studies of young children have demonstrated that children attend seriously to such communication models (Clay, 1976; Hall, Moretz, & Statom, 1976).

The instrumental function of language incorporated a smaller portion of the children's perceived functions of writing. This is contrastive to the development of oral language whereby Halliday (1977b) suggested that the instrumental function is the simplest model of language and one of the first to evolve. The nature of writing includes the preservation of a message in time and space. The need to read and reread a message is demanded to retrieve the information. The instrumental function of writing is probably less obvious to young children in this age group because they are not yet able to read.

Goodman and Goodman (1976) stated that children in literate societies become aware early of the regulatory function of written language. As an example they cited children's understanding of the command given by a stop sign. Curiously, the regulatory function was not described by any of the children in this study as a reason for writing. Perhaps inexperience with reading has limited the children's capacity to recognize the power and control over others that can be exercised through writing. The absence of the heuristic function may possibly be explained in this same manner. The children's lack of recognition of the representational function of writing may have been predicted because Halliday (1977a) portrays it as being used mostly by adults.

It has been said that learning to produce and understand spoken language occurs effortlessly and naturally, while learning to read requires a great deal of work (Foss & Hakes, 1978). The explanation for such a statement about written language may be found in the responses of the children in this study to the question, "Why do people write?". The children's responses indicated that they have a narrow perspective of the possible roles for writing. This limited perspective may have been responsible for the conclusion that children's understanding of the role of writing is vague (Downing, 1969; Vygotsky, 1962). If a language must be functional to be learned (Halliday, 1977b), and if children come to school realizing and using all the functions of oral language (Goodman & Goodman, 1976), then children must be made aware that

these functions of language may be served through writing. This transfer is apparently less obvious to children than to adults. The uses of written language are probably less obvious to children because reading and writing develop simultaneously. In acquiring oral language, the process of listening motivates the development of speech by providing a model through which children can recognize the various functions that oral language serves. The expressive form of writing has reading as its receptive counterpart. The overlapping development of the reading and writing processes precludes the advantage of a built in model for predetermining the functions of written language.

Question Two

Responses to the question, "What do you have to do to be a good writer?" were categorized among four categories:

A - Unacceptable; responses included "I don't know," an avoidance of a response, or no reply

B - Learn; responses included "Go to school," "learn," or general learning tips such as listening, following directions, taking your time, practice

C - Artistic ability; responses included "Be an artist," "Color in the lines," etc.

D - Reference to content; responses included reference to writing alphabetic letters, words, or reading what was written.

Table 4 shows the percentages of responses to question two within each category at the four interviews.

Table 4

Percentages of responses to question two within categories

Categories	Fall 1981	Spring 1982	Fall 1982	Spring 1983
A	50	23	5	-
B	40	68	62	86
C	-	5	10	14
D	10	5	24	-

Note. Percentages are rounded to the nearest whole number.

Half of the children at the beginning of nursery school were either unable or unwilling to respond to the question "What do you have to do to be a good writer?", but at the end of kindergarten all children gave a response, with the most common answer pertaining to school learning techniques. The responses included remarks such as following directions, being neat, being good, going to school, practicing, and learning. Clearly, the children viewed writing as a school activity where they must behave and follow rules. It is curious that 24 percent of the children abandoned their concern for the content of writing, where their responses included forming letters, learning words, writing names, and reading what is written, between the beginning and end of

kindergarten. These results suggest that the children became more concerned during kindergarten about the mechanics of writing and their own conformity to school than about the content of what they write.

Responses within category C indicate a continued struggle for children with the differentiation between writing and drawing. It is interesting to note that children's responses within this category increased with age. This may be explained by the observation that their responses, while referring to drawing and artistic ability, included a flavor of conforming to school standards.

Responses in both categories B and C demonstrate an important perspective of the kindergarten child. The responses of the children reflected the emphasis of traditional kindergarten on readiness skills and learning habits, and demonstrated that the adjustment to school is perceived by children to be a demanding task.

Question Three

Responses to the question "What is the hardest thing about writing?" were categorized among five categories:

A - Unacceptable; responses included "I don't know," avoidance of a response, no reply

B - Getting it on paper; responses included reference to speed, correcting mistakes, neatness of paper, keeping in the lines, etc.

C - Letter formation; responses included making the letters, or forming names

D - Word formation; responses referred to spelling or thinking of words to write

E - General school work; responses included cutting, pasting, homework, cursive

One response was "To write things like that" (pointing to the researcher's notes) and was not able to be categorized. Table 5 shows the percentages of responses within a category at each of the four interviews.

Table 5

Percentages of responses to question three within categories

Categories	Fall 1981	Spring 1982	Fall 1982	Spring 1983
A	62	62	26	18
B	10	5	35	32
C	10	24	13	5
D	5	5	13	18
E	14	5	9	27
Unknown	-	-	4	-

Note. Percentages are rounded to the nearest whole number.

The decrease in unacceptable responses with age to this question shows the children's increased experience with writing, and the beginnings of their awareness of their own thinking about learning.

The obvious increase of responses in categories B and E with age demonstrates the increased awareness of the children to conformity to school conventions. It is possible that the motor coordination demanded for school adjustment prompted responses of category B, such as "It's hard to cut," "It's hard not to scribble," "If you press down you might get a hole in it," "You have to write so much," or "Just to write fast." Limitations imposed by motor development may have also prompted the concern for letter formation and name writing, as in category C. Responses in category C increased and then decreased over time. This phenomenon may be the result of the practice in letter formation which was emphasized during nursery school and kindergarten. The lower percentage within category C at the end of kindergarten may reflect the improved confidence and ability in this area that resulted from the practice.

The growing concern at the end of kindergarten appeared to be the writing of words. This was marked by an increase of responses in category E. The chief limitation perceived by the children in forming words was spelling.

Part 2

Analysis of Writing Samples and Writing Episodes

The writing samples and episodes of the 21 children were analyzed with five levels emerging.

Level one was characterized by scribbling, scribble writing, and mock letters. Some children referred to their scribbling as letters, numbers, or names.

Level two was represented by the writing of a few select letters. The children wrote letters which were contained in their own name and often commented that a specific letter was part of their name. The letter writing at this level was clearly non-random and demonstrated an attempt by the children to form their own names.

Level three was characterized by the ability of the children to write their name. There was, however, a wide range of success at name writing. Some children wrote their first and last name in perfect form, some reversed letters especially b, d, and J, some could only get a shortened version of their name down such as Mike or Joe; but all wrote their name in some form. Many included drawings or letters, and most discussed difficulties with letter formation often erasing or crossing out.

Level four was characterized by success at name writing and the listing of the names of significant others such as Mommy, Daddy, and siblings. Some children at this level also included short one syllable words commonly used such as love, yes, no, cat.

Most children were very talkative describing difficulties with letter formation, with remembering which letter came next, and with confusion of similar letters such as r and n. Erasing and reference to mistakes were commonplace. Many children included drawings with their writing.

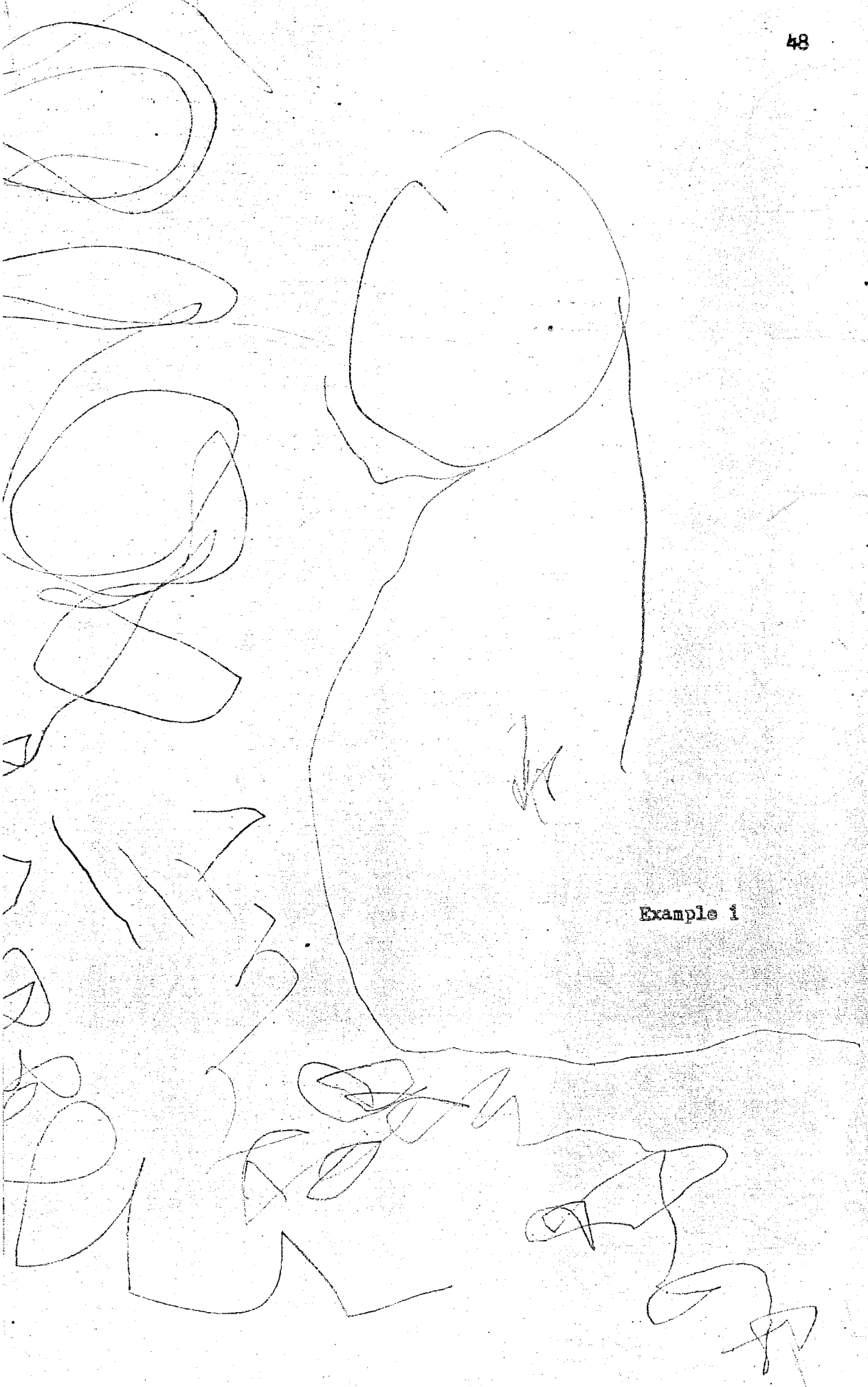
Only one child demonstrated writing at level five, and it is noteworthy that he began reading during the latter half of nursery school. His writing at this level included a sentence (God loves you) and a note of goodbye to the researcher at the last visit. He demonstrated word play with words like jim and jam and proceeded to scramble words for the researcher to figure out. His writings at level five included abbreviations and invented spellings. It also reflected his large exposure to words through reading. During kindergarten this child went to a first grade class for the daily reading period.

Table 6 shows the levels of writing described for each of the 21 children at the four intervals. Samples one through five represent typical writing samples at the five levels.

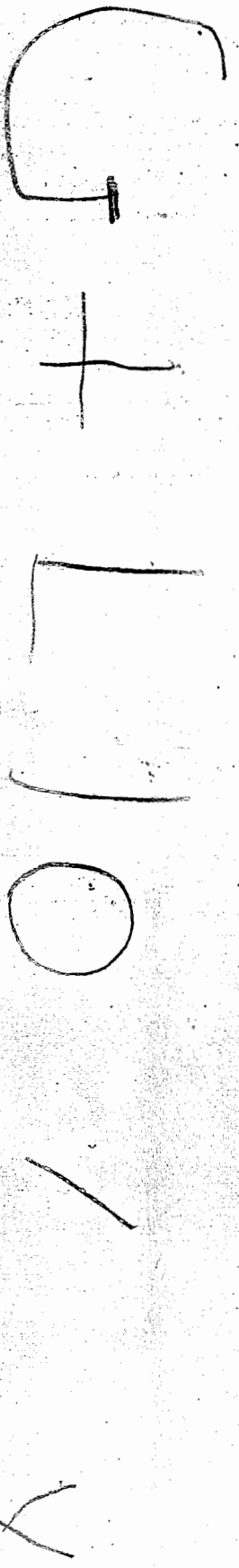
Table 6

Levels of writing for individual children

Name	Fall 1981	Spring 1982	Fall 1982	Spring 1983
Todd	3	3	3	3
Leah	4	4	4	4
Kimberlee	1	3	4	4
Joy	4	4	4	4
Donielle	1	3	3	4
Amy	4	4	4	4
Joseph	3	3	3	3
Robert	3	4	4	4
Kent	2	3	3	3
Michael	3	3	3	3
Jessica	3	4	4	4
Jason	1	3	3	3
Matthew	1	3	4	3
Ammie	2	3	3	4
William	3	4	4	4
Shawn	4	4	5	5
Emily	3	3	4	4
Beth	1	3	4	4
Gregory	2	2	2	3
Adam	3	3	3	3
Kendra	3	4	4	4



Example 1



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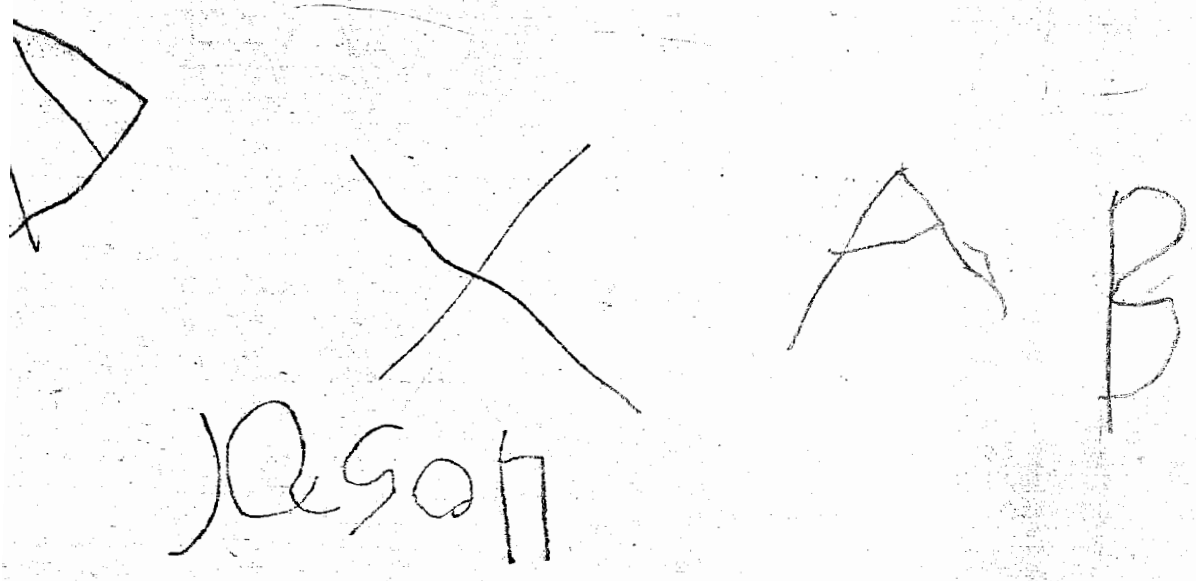

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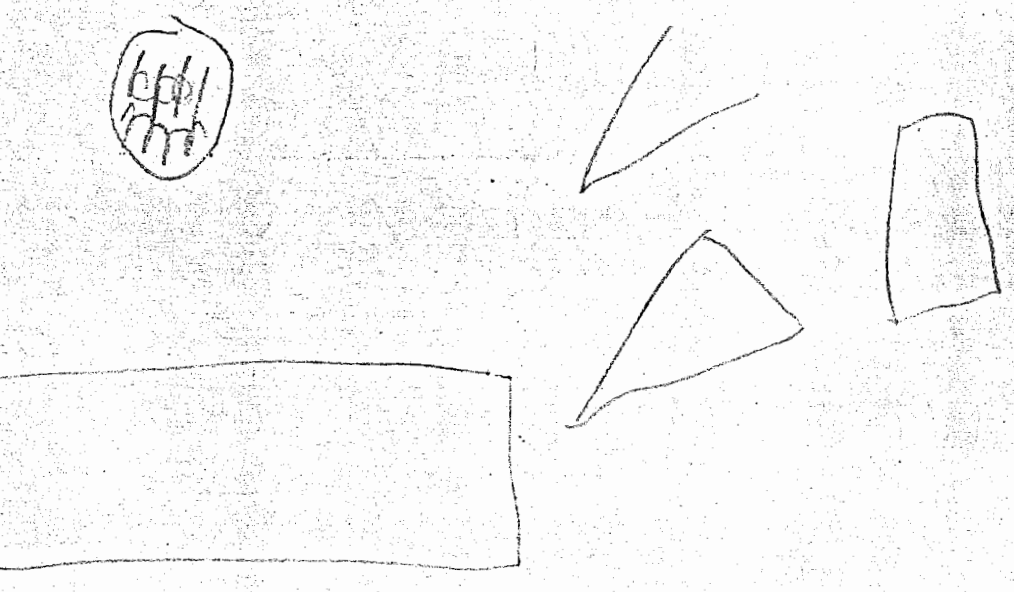
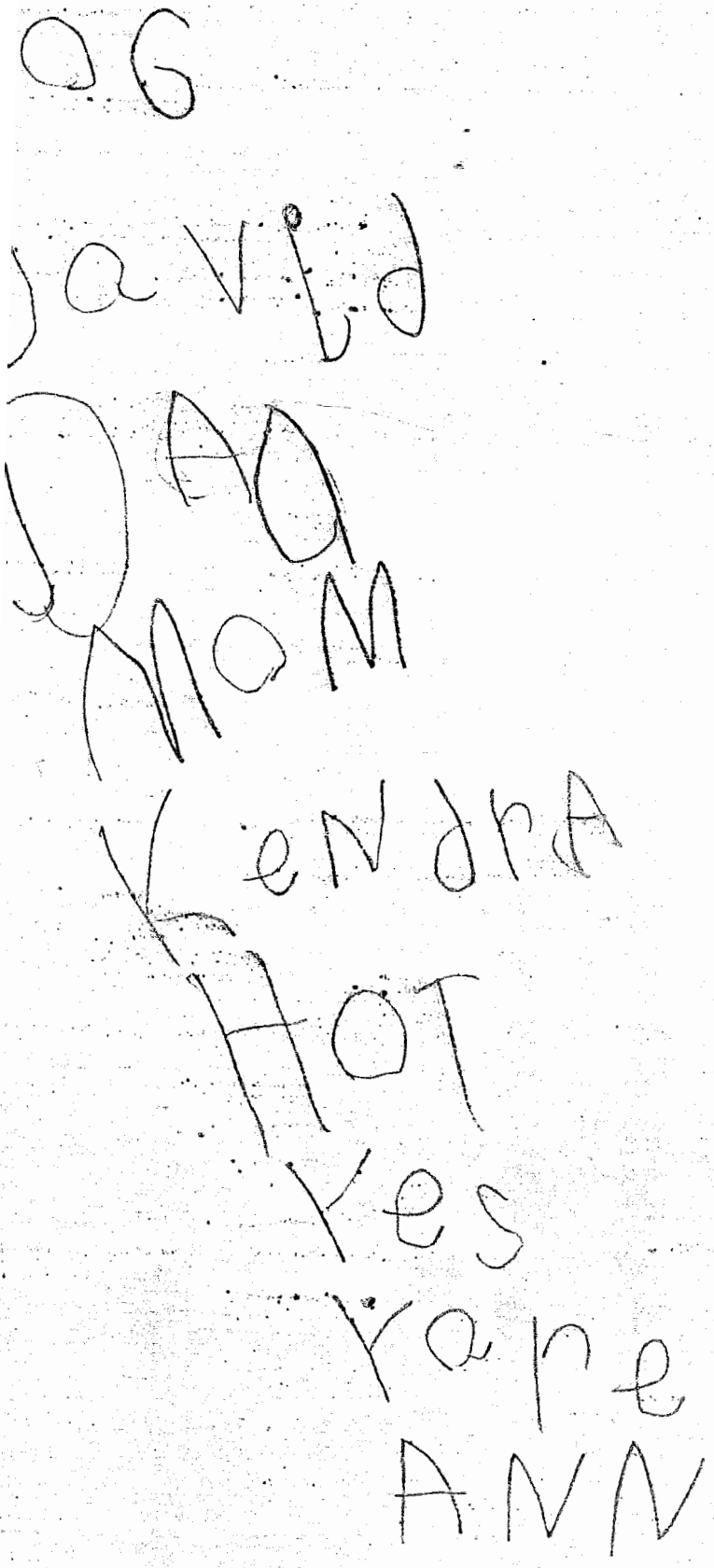
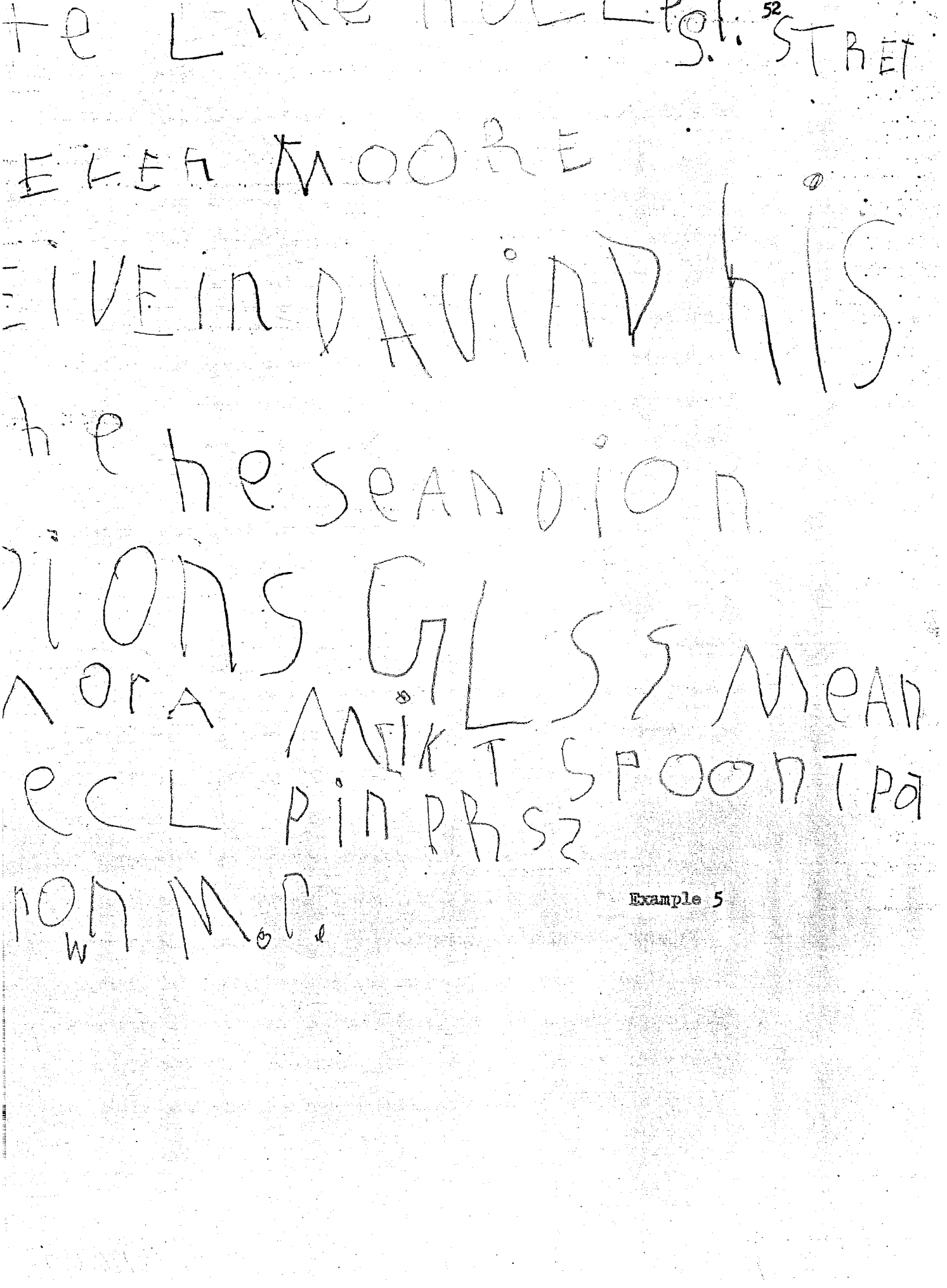




Example 4



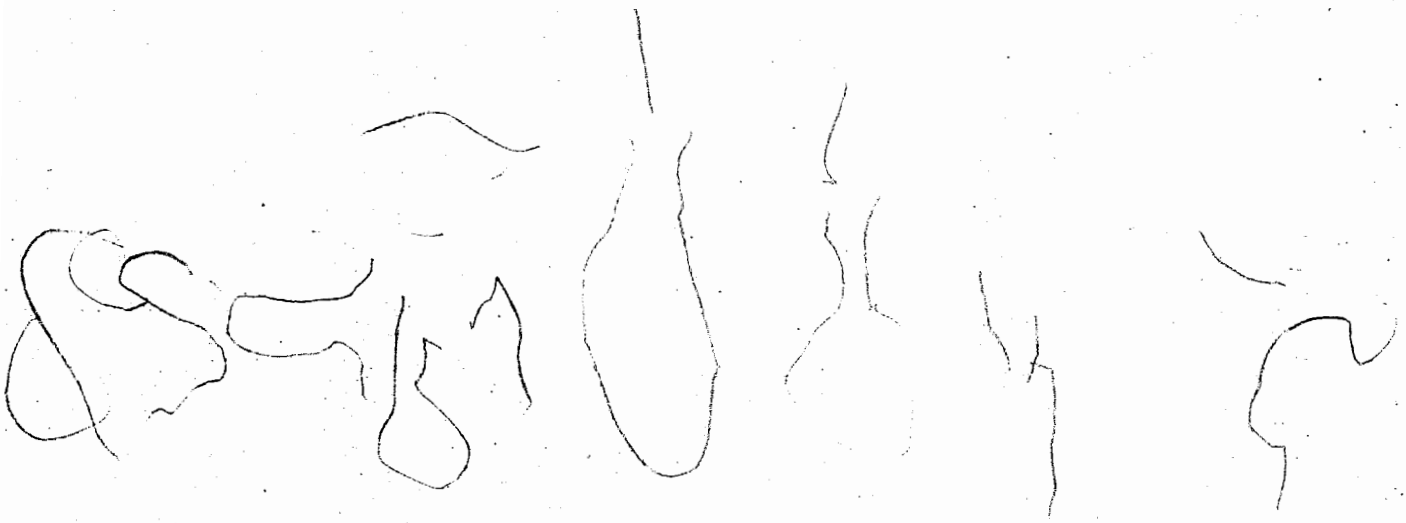
Example 5

The five levels of writing were further analyzed according to the principles and concepts described by Clay (1975).

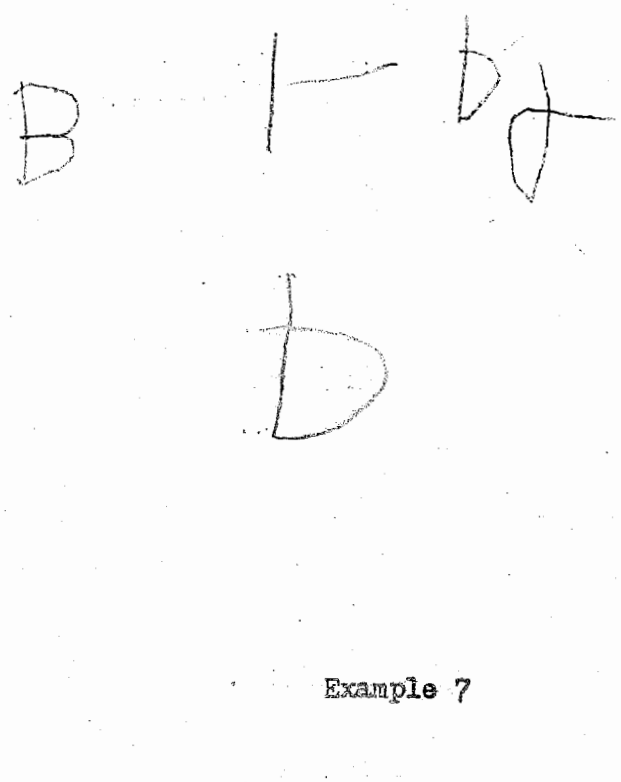
Children of level one, through scribble and mock letter writing, demonstrated an awareness that writing involves purposeful marks on paper and that a code exists for these marks. This is evidence of the children's understanding of the sign concept. One child at this level showed greater progress. Beth's combination of scribble writing and mock linear writing included repetition of mock letters to form a message, in this case the message was her name (Example 6). She thereby demonstrated knowledge of the message concept and the recurring and directional principles.

At level two, all children observed the directional principle although not steadfastly. Their desire to write their names demonstrated knowledge of the message concept, while their discussion of letters verified their acceptance of the sign concept. The children also demonstrated flexibility through experimentation with letter formation. Kent (Example 7) typifies this experimentation.

The sign and message concepts were clearly obvious to children at level three. The children all observed directionality, however, Adam once got off to a bad start, writing his name from right to left, forming a mirror image of his name. Adam later demonstrated the recurring principle, writing his name repeatedly (Example 8). The generating principle for letters was also used by children at level three. Kimberlee's message TOMOT is

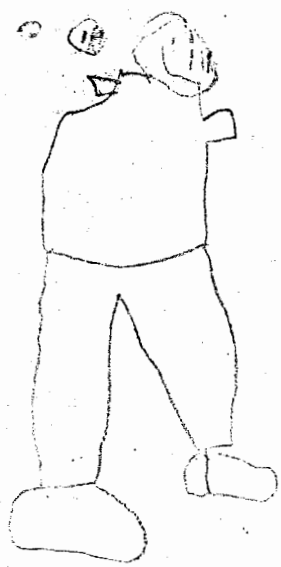


Example 6



Example 7

Adam Wright



Example 8

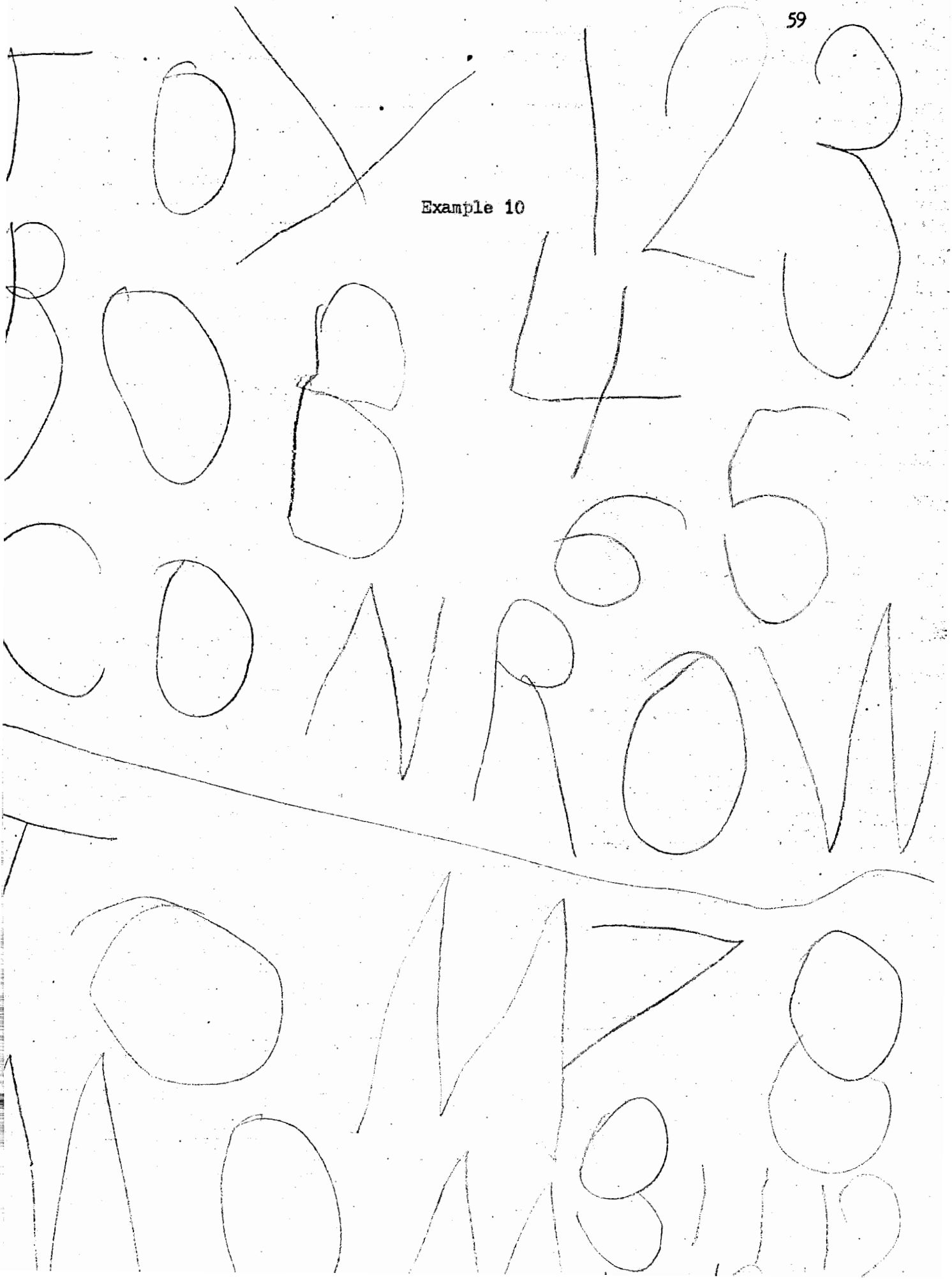
representative (Example 9). Michael used the copying principle for drawing at this level. Unable to think of anything to make, he looked around and resorted to copying an Easter egg with a flower on it from the bulletin board.

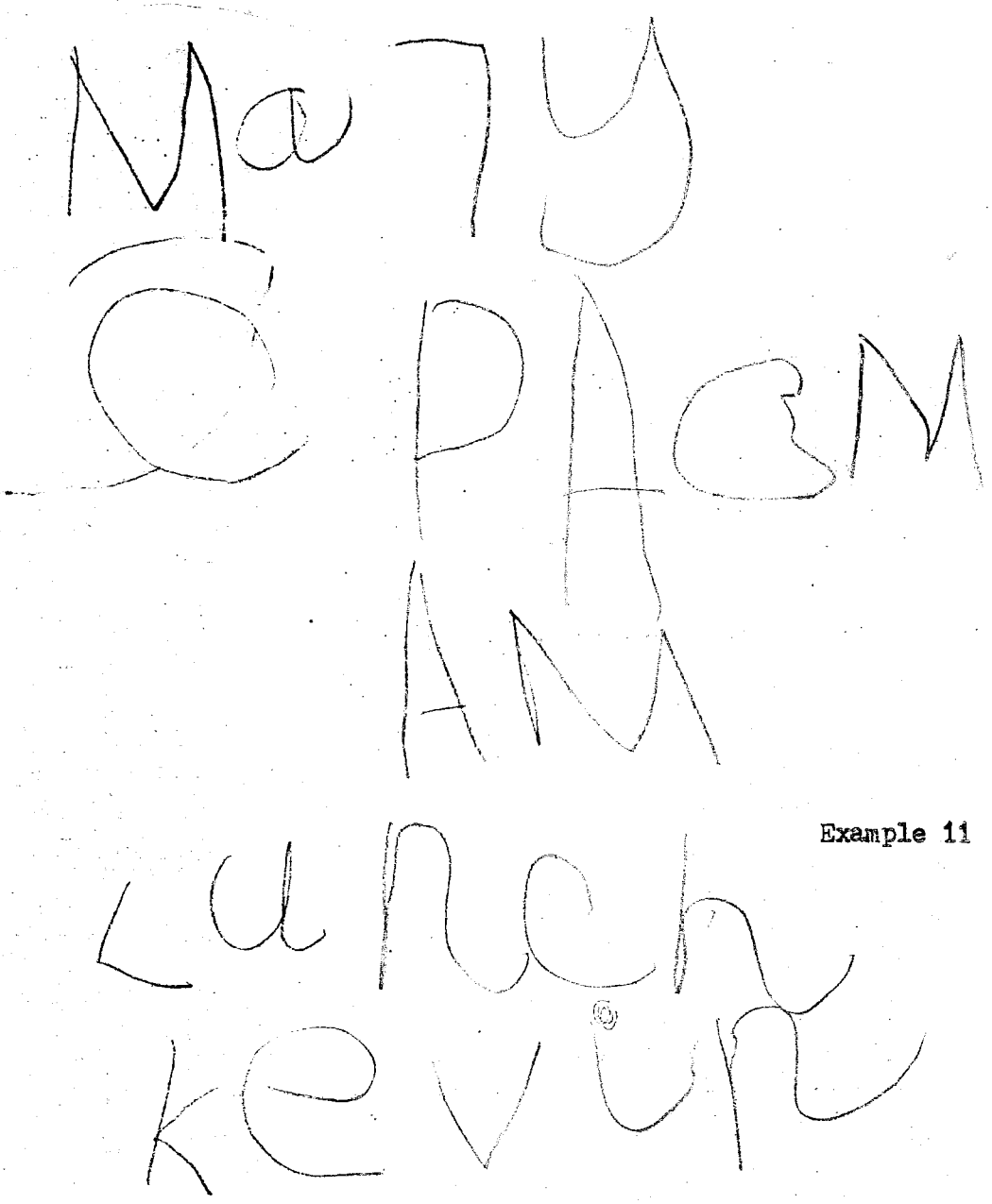
At level four, the children again demonstrated the sign and message concepts. They observed directionality in their writing and demonstrated the inventory principle by listing names and words they knew how to write. Some children at this level encountered problems when they ran out of space on the page. This is demonstrated in Joy's inventory of names and numbers (Example 10). Joy fills up the page, abandoning order to get everything to fit. Children at level four demonstrated the copying principle when their own supply of words ran out. Shawn incorrectly copied "cheese" off a wall poster, writing CHEEZ, and Beth (Example 11) ran out of space while incorrectly copying "Pacman" from gear on the nearby coat rack. The contrasting, flexibility, and recurring principles were used by a few children at this level. Leah (Example 12) demonstrated all three. She contrasted Go and Stop, flexibly explored words when writing No and On, and repeated Ho three times. A few children at this level began to use punctuation. Beth hyphenated her mother's name "Bar-bara." William separated the names he wrote with periods (Example 13). Robert represented his friend as TK which demonstrated use of the abbreviation principle.

Shawn was the only child achieving level five. He demonstrated

Example 9

Example 10





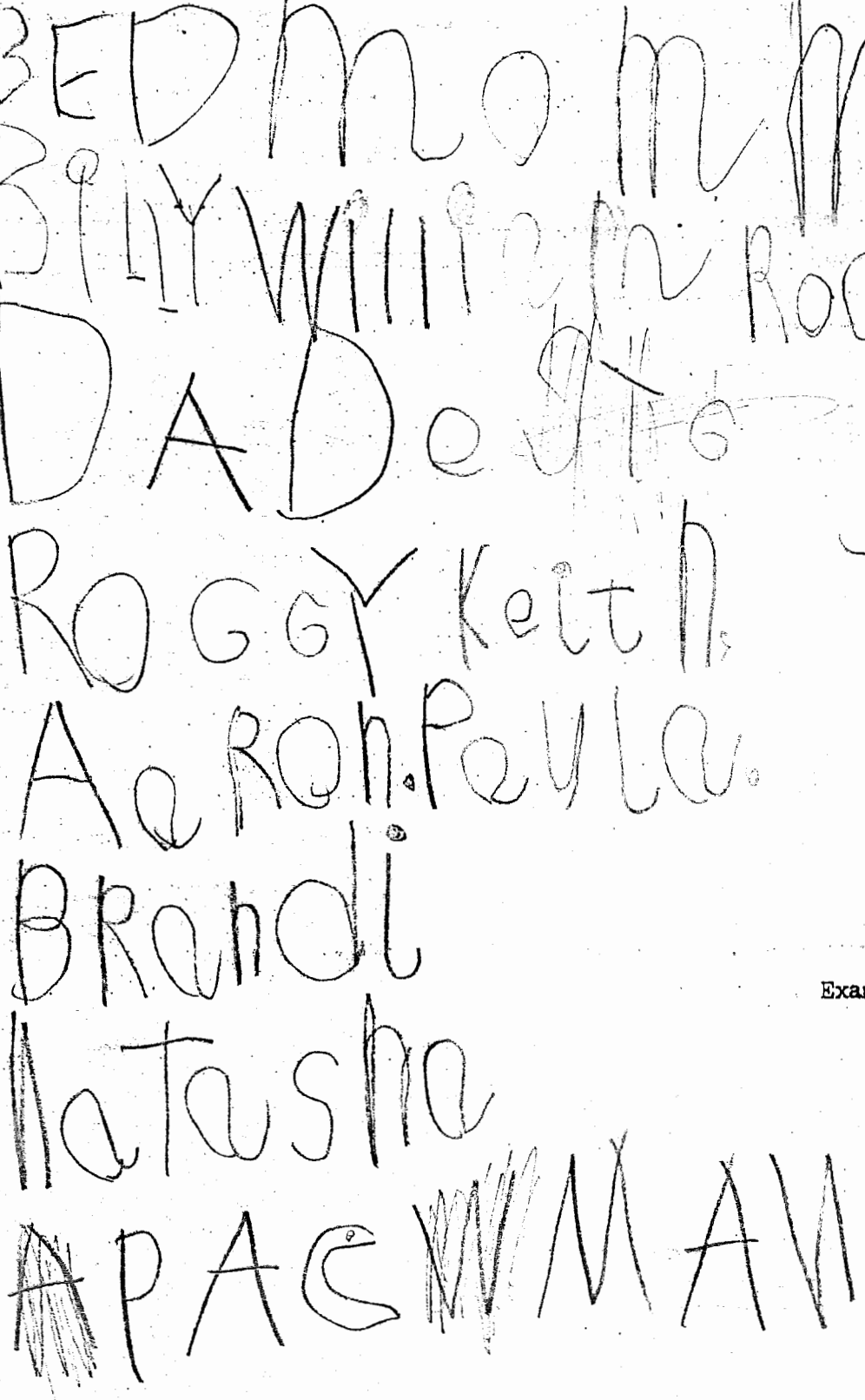
Example 11

can Happy Mom Dad Brown

O Stop Leah HoHoHo

No ON

Example 12


BED
mommy
Billy
ROGGY
DADDY
Steve.
ROGGY
Keith.
Aaron.
Paula.
Brandi
Natasha
PACMAN

Example 13

use of the message, sign and space concepts, as well as the inventory, copying, directional, contrasting, abbreviation, and flexibility principles. He generated new words through invented spelling when writing PecL for pencil, Pin for pen, T SPOOn for teaspoon, and Bron for brown. He demonstrated the recurring principle at a higher level when writing TUB and BUB. Shawn made compromises also when encountering lack of space on the page. Clearly, Shawn used many strategies in his writing and can be characterized as a risk taker while he explores written language.

Harste and his colleagues (1981) suggested that children and adults use four strategies in learning language. A brief explanation of these strategies is presented here because the children in this study used these strategies increasingly as they progressed through the five levels.

Semantic intent - the expectation that all print will be meaningful; print makes sense

Hypothesis testing - risk taking, outgrowing oneself

Negotiability - pragmatic choices, choosing among options of what will be represented and how it will be represented

Fine tuning language with language - interplay of language in its four expressions, "multi-media event"

Table 7 shows the number of children at each level for each of the four intervals.

Table 7

Number of children within levels

Levels	Fall 1981	Spring 1982	Fall 1982	Spring 1983
1	5	0	0	0
2	3	1	1	0
3	9	12	8	8
4	4	8	11	12
5	0	0	1	1

Clearly, all the children except one were able to write their names in some form at the end of nursery school and some were able to write the names of others and/or short words. At the end of kindergarten, all children could write their own names in some form and more of the children could write the names of others.

The descriptions of levels of writing according to principles and concepts of Clay (1975) verifies Clay's conclusion that children's development is characterized by a wide range of individual differences and that exploration of language is approached from a variety of directions. However, the children at higher levels of writing ability demonstrated an increased use of these principles and concepts. This increase suggests that

children's use of these concepts and principles indicates progress. The child of level five, who demonstrated all such principles and concepts, and who learned to read early, indicates the importance and value of the use of these strategies. The child at level five discovered the alphabetic principle of written language; he clearly took many risks using many possible strategies to investigate written language. His parallel reading development implies the role of writing in facilitating reading instruction and mandates the encouragement of children to take risks.

The initial hypothesis that prompted this research was the belief that children would likely proceed from writing letters, to writing words, to writing sentences, in the evolution of their mastery of the writing process. This however was not true. Some children initially formed letters, but only did so in attempting to write their own name. The obvious result was the progression from name writing, to the writing of significant others' names, to the writing of short words. Letter and number formation were interspersed sporadically. From the psycholinguistic perspective this phenomenon is logical. Children expect print to be meaningful and initially operate from a global perspective when investigating language. This represents the strategy of semantic intent. Nothing could have more meaning to a young child than his/her own name. Children also have many opportunities to see their name in print in their environment. Ferreiro and Teberosky (1982) referred to children's listing of names and short words as "fixed forms"

which children are able to reproduce without a model. They stated that these fixed forms are culturally and personally acquired. Perhaps children use these fixed forms, which are highly meaningful, to analyze written language more specifically. Increasing their repertoire of names and words requires new letters, thus explaining the children's concern at levels three and four with letter formation. With letter formation behind them, children used copying and other such strategies to increase their word lists. This process may eventually lead to exploration of language through invented spelling as Shawn demonstrated at level five. It appears that the inventories of names and short words serve the purpose of motivating children's exploration of language through writing in a meaningful way. It also appears to allow children to progress from a global to a specific perspective as is generally characteristic of children's approach to language.

Curiously, drawings were only included at levels three and four. This coincides with the confusion between writing and drawing that was expressed during the interview questions. Perhaps children of level one and two viewed writing as a mysterious code with a recognizable form which they tried to imitate. Drawing at levels three and four may have served as a rehearsal or negotiating strategy for these children and may therefore actually be indicative of progress in the exploration of written language. Graves (Walshe, 1982) has urged that children use many techniques to brainstorm ideas for writing. He referred to this pre-writing

activity as rehearsal. Harste and others (1981) suggested that children negotiate or decide among many options in language, using choices which serve their purposes best and which meet social demands. In the case of rehearsal, children's drawings provided ideas for writing. Jessica exemplified this by drawing a picture of her sister and then said that she could write her sister's name; which she then did. Other children drew when they exhausted their supply of fixed forms. In this way they negotiated an option which allowed them to cooperate.

Some other interesting observations were noted. At the end of kindergarten, Gregory, then at level three, wrote the word "HI" but was not aware that he had written a word. He explained that he thought a word needed three letters. Ferreiro and Teberosky (1982), in extensive studies of Spanish speaking children, discovered that children form the hypothesis that reading cannot take place with fewer than three letters and that the letters must vary in order. The degree to which other children in this study perceived such a hypothesis cannot be determined. However, strings of letters formed by these children incorporated at least three letters and varied combinations of letters. The inclusion of many three letter words in children's inventories may also be related to this theory.

A few children spelled letters orally before or during the writing of a word. Kendra spelled O - U - T as she wrote out and Y - E - S as she wrote yes. This strategy likely aids in the

remembering of letter order for the fixed forms. This represents the strategy of fine tuning language with language. This strategy was evident in the children's frequent talking during writing episodes and also in Shawn's reliance on his parallel development in reading. Many children talked during the writing episodes, sometimes allowing their spoken ideas to direct their writing options.

No consistent pattern appeared in the use of upper and lower case letters. Children likely used the familiar form that they witnessed in the words in their environment or were taught a form to use. However, this does not account for the children's interchange of upper and lower case when copying. It may be that the decisive factor is the ease in which the letter can be produced. Thus, a child who can readily form upper case "A" will choose that form, especially if lower case "a" is problematic for him/her. In essence, the child negotiates as s/he writes, making choices that work to his/her advantage.

Summary

The analysis of the data of this research was divided into two sections, with part one containing the interpretation of the responses to the three interview questions and part two consisting of the analysis of the writing samples and writing episodes.

Responses to the three questions were categorically arranged. The results revealed that the children perceived limited functions of writing, recognizing the personal and interactional functions

and to a lesser degree the instrumental and imaginative functions. It was also discovered that the children perceived adjustment to school conventions as a demanding task, with motor coordination, letter formation, and spelling as chief obstacles.

The writing samples and writing episodes were analyzed with five levels emerging. Increase in use of language exploration strategies described by Clay (1975) and Harste and others (1981) characterized progress in writing. Children were observed to follow a general sequence of writing, beginning with the writing of their own name, to writing names of significant others, to writing one syllable words. Letter and number writing were interspersed sporadically. It was theorized that this sequence is psycholinguistically logical, as it allows for a meaningful investigation of language from a global to a specific perspective.

Chapter V

Conclusions and Implications

Purposes

The purposes of this study were to investigate how young children perceive the writing process, and to describe the characteristics and changes in their writing before receiving formal instruction.

Conclusions

The results of this two year longitudinal study substantiates many of the discoveries of recent researchers and reveals the complexity that characterizes language learning for children.

One of the most important conclusions that can be formulated by the results of this study is that children perceive a limited perspective of the functions of writing, and thereby need to be made aware of a wider scope of functions that writing may serve. It appears that the most commonly perceived function of writing, and the first to evolve, is the personal function.

Two other conclusions concerning the perceptions of children about writing must be noted. Children's serious concern for the mechanics of writing and for the adjustment to school suggest constraints in their exploration of language through writing. Two obstacles perceived by children are firstly, letter formation and secondly, spelling.

The initial hypothesis that motivated this research concerned a developmental sequence of writing. It appears that children progress from writing their own name, to writing names of others, to writing one syllable words. These words become fixed forms that prompt children's experimentation of language. This is psycholinguistically logical. This progression allows writing to be meaningful, and permits children to explore language from a global to a specific perspective.

The increased use of language strategies that characterized progress through the levels suggests a need to encourage this experimentation. It also mandates careful analysis of children's writing to determine progress already made and to enhance further experimentation. The relationship of writing to learning to read is made apparent by the parallel success of the young boy of level five in both areas. His use of many strategies exemplifies their value for learning language. It may be that these strategies allow for the awareness of the alphabetic principle. These strategies therefore may be precursors of invented spelling strategies.

Several hypotheses were proposed as explanations for the results of this study and suggest further investigation. It was proposed that simultaneous development of reading and writing precluded a model for children's recognition of the functions of writing. The basis for this suggestion was that children learn oral language naturally because they know what it does; that is to say, they recognize its functions. The functions of oral language

become obvious to children as they listen to others speak.

Some research has given importance to children's confusion of writing and drawing. It may be that children find differences between the two difficult to discern. However, this study raised the possibility that drawing may actually be indicative of progress. This was suggested in cases where children used drawing as a negotiating or rehearsal strategy, thereby demonstrating experimentation.

Implications for Research

Recent research has unfolded a vast wealth of information about children's language learning. This research substantiated many of these findings, but also raises new questions.

More investigation concerning children's perceptions of the functions of writing is essential. A series of questions, as well as tasks, designed to reveal children's conception of the roles of writing could comprise such a study.

Researchers must also search for techniques to help children recognize the various functions that writing can serve. New methods that encourage children to increase use of strategies for exploring writing must be designed and tested. Variabilities must be discussed, such as teacher interference in these techniques and the degree of convention that is stressed.

Evidence of the minimum-quantity hypothesis (Ferreiro & Teberosky, 1982) existed in this study. Studies involving the

presence of this perception in English speaking children should be explored further.

Further examination for evidence of the name, to others' names, to words sequence in children's writing is important.

One boy, exceeding this sequence, included invented spellings, phrases, and sentences. Another question to be answered would involve development in these areas.

Implications for Classroom Practice

Clearly, the school beginner has already formed many conclusions about written language as s/he enters school. Teachers need to talk to children and observe them carefully, to understand their abilities and limitations.

Two main implications for curriculum have become apparent from the results of this study. Firstly, teachers need to model the functions of writing. Children need to understand that writing serves purposes other than personal functions. They need to know that the conventions that they learn in school are for reasons other than conforming. Teachers must also find various ways to draw children's attention to the purposes for writing. By reading widely to children with follow up discussion of the author's point of view, teachers may broaden children's concepts of the function of writing. Secondly, children's writing must be carefully analyzed to assess progress made and to guide further instruction. Therefore, it is important that teachers understand that which indicates progress.

Many secondary implications are also suggested by this research. Teachers must encourage children to explore language using many strategies. This necessitates the teacher's giving more attention to content of writing than to form. Since children begin with names and words, it is likely that the best instruction in the writing process should begin here. Letter formation in nursery school and kindergarten might be presented on demand as children need to know specific letters when forming their chosen words. This method would be similar to writing experiences described by Graves (Walshe, 1982). Here children would write daily, choosing their own words with conventions and strategies being introduced through individual teacher conference. This technique would be more meaningful to children than merely printing the alphabet. It is also content oriented while deemphasizing format and convention. Above all, teachers must give children time to experiment with writing. Children need this time to use various strategies.

This study also suggests a role of writing in learning to read. This finding offers a good argument for the encouragement of children to use invented spellings.

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